

Amendments to the Claims:

These claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method for combining a data packet in a communication system, the method, comprising:

receiving a transmission of said data packet to obtain a received packet;

demodulating said received packet to be stored in a first storage medium;

determining whether said received packet is a retransmitted packet by comparing a field of said received packet with a corresponding field of a previous packet stored in a second storage medium according to at least one predetermined criterion; and

~~if so said received packet is the retransmitted packet,~~ combining said received packet with a said previous packet stored in a second storage medium using a maximum ratio combining method.

2. (previously presented) The method of claim 1, wherein the determining whether said received packet is a retransmitted packet further comprises:

determining whether corresponding length fields of said received packet and said previous packet are the same;

determining whether a retry bit field of said received packet is activated when the corresponding length fields of said received packet and said previous packet are the same; and

determining whether corresponding sequence control fields of said received packet and said previous packet are the same when the retry bit field of said received packet is activated.

3. (previously presented) The method of claim 1, wherein the determining whether said received packet is a retransmitted packet further comprises determining whether corresponding address fields of said received packet and said previous packet are the same.

4. (previously presented) The method of claim 1, wherein the combining the received packet with said previous packet is performed according to a signal-to-noise ratio (SNR) symbol of said received packet and said previous packet.

5. (canceled)

6. (previously presented) The method of claim 1, wherein the combining said received packet with said stored packet is performed in an access point (AP).

7. (previously presented) The method of claim 6, wherein the combining said received packet with said previous packet is performed in a mobile station in communication with said AP.

8. (previously presented) The method of claim 1, wherein the determining whether said received packet is a retransmitted packet further comprises:

determining whether corresponding length fields of said received packet and said previous packet are the same;

determining whether a retry bit field of said received packet is activated when the corresponding length fields of said received packet and said previous packet are the same;

determining whether corresponding address fields of said received packet and said previous packet are the same when the retry bit field of said received packet is activated; and

determining whether corresponding sequence control fields of said received packet and said previous packet are the same when the address field of said received packet and said previous packet are the same.

9. (previously presented) A method for combining a data packet in a communication system, the method comprising:

receiving and storing a transmission of said data packet in a first storage medium to obtain a received packet;

extracting a physical layer convergence protocol (PLCP) and MAC header from said received packet;

comparing corresponding PLCP and MAC headers of said received packet and a previously received packet with error stored in a second storage medium to determine whether said received packet is a retransmitted packet; and

if so, combining said received packet with said previous packet using a maximum ratio combining method.

10. (previously presented) The method of claim 9, wherein the combining the received packet with said previous packet is performed according to a signal-to-noise ratio (SNR) symbol of said received packet and said previous packet.

11. (previously presented) The method of claim 9, wherein the determining whether said

received packet is said retransmitted packet further comprises determining whether corresponding address fields of said received packet and said previous packet are the same.

12. (previously presented) The method of claim 9, wherein the determining whether said received packet is said retransmitted packet further comprises:

determining whether corresponding length fields of said received packet and said previous packet are the same;

determining whether a retry bit field of said received packet is activated when the corresponding length fields of said received packet and said previous packet are the same; and

determining whether corresponding sequence control fields of said received packet and said previous packet are the same when the retry bit field of said received packet is activated.

13. (previously presented) The method of claim 9, wherein the combining said received packet with said previous packet is performed in an access point (AP).

14. (previously presented) The method of claim 13, wherein the combining said received packet with said previous packet is performed in a mobile station in communication with said AP.

15. (previously presented) The method of claim 9, wherein the determining whether said received packet is said retransmitted packet further comprises:

determining whether corresponding length fields of said received packet and said previous packet are the same;

determining whether a retry bit field of said received packet is activated when the corresponding length fields of said received packet and said previous packet are the same;

determining whether corresponding address fields of said received packet and said previous packet are the same when the retry bit field of said received packet is activated; and

determining whether corresponding sequence control fields of said received packet and said previous packet are the same when the address field of said received packet and said previous packet are the same.

16. (currently amended) An apparatus for combining a data packet in a communication system, comprising:

a demodulator for demodulating a transmission of said data packet to obtain a received packet;

a first storage for storing said received packet;

a second storage for storing a previous packet with error;

a processor for determining whether said received packet is a retransmitted packet in response to said previous packet based on a comparison between a field of said received packet and a corresponding field of said previous packet according to at least one predetermined criterion; and

an adder for adding said received packet with said previous packet if said received packet is the retransmitted packet when said at least one predetermined criterion is satisfied.

17. (previously presented) The apparatus of claim 16, further comprising at least one antenna for receiving the transmission of said data packet and said previous packet.

18. (previously presented) The apparatus of claim 16, wherein said adder uses a maximum ratio combining method.

19. (previously presented) The apparatus of claim 16, wherein said maximum combining method is performed according to a signal-to-noise ratio (SNR) symbol of said received packet and said previous packet.

20. (canceled)

21. (previously presented) The apparatus of claim 16, wherein said processor further operates to determine that said received packet is a retransmitted packet when corresponding length fields of said received packet and said previous packet are the same.

22. (previously presented) The apparatus of claim 16, wherein said processor further operates to determine that said received packet is said retransmitted packet when a retry bit field of said received packet is activated.

23. (previously presented) The apparatus of claim 16, wherein said processor further operates to determine that said received packet is said retransmitted packet when corresponding address fields of said received packet and said previous packet are the same.

24. (previously presented) The apparatus of claim 16, wherein said processor further operates to

determine that said received packet is said retransmitted packet when corresponding sequence control fields of said received packet and said previous packet are the same.

25. (currently amended) The method of claim 1, wherein ~~said at least one predetermined criterion is~~ it is determined whether said received packet is the retransmitted packet based on corresponding medium access control (MAC) frames of said received packet and said previous packet.

26. (currently amended) The apparatus of claim 16, wherein ~~said at least one predetermined criterion is~~ said processor further operates to determine whether said received packet is the retransmitted packet based on corresponding medium access control (MAC) frames of said received packet and said previous packet.